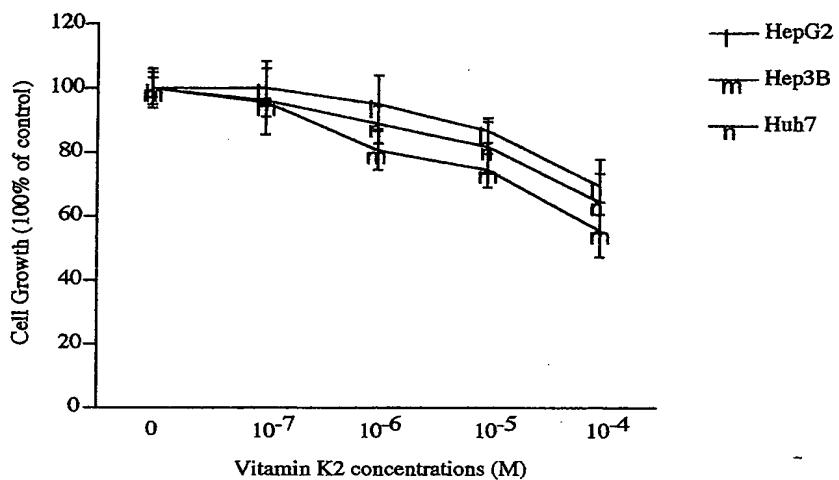


FIG. 1(a)

Effect of Vitamin K2 (48 h) on the proliferation of HCC cells



Effect of Vitamin K2 on the expression of the cyclin dependent kinase (Cdk) inhibitors (p27, p21, p16)

FIG. 1(b)

RT-PCR

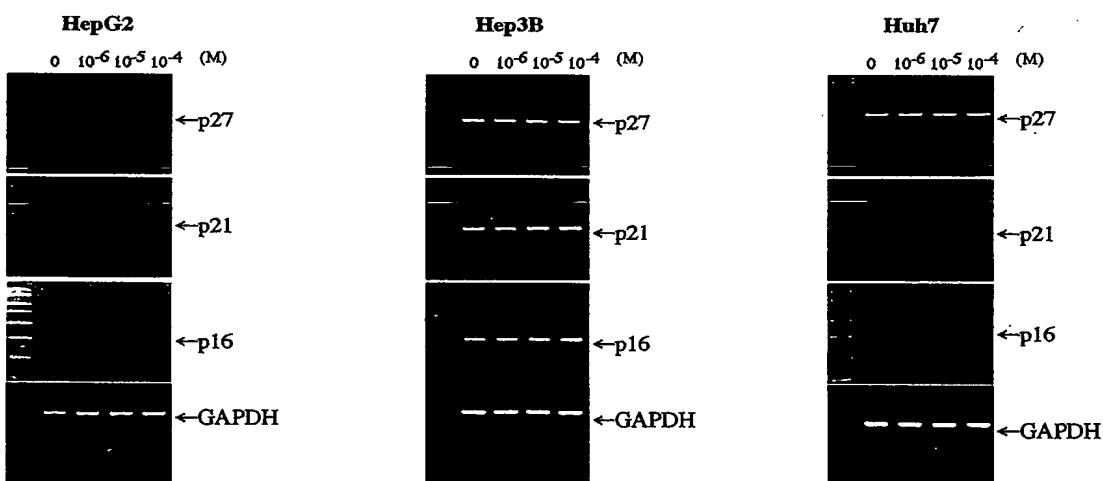
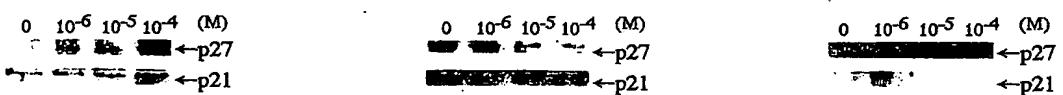


FIG. 1(c)

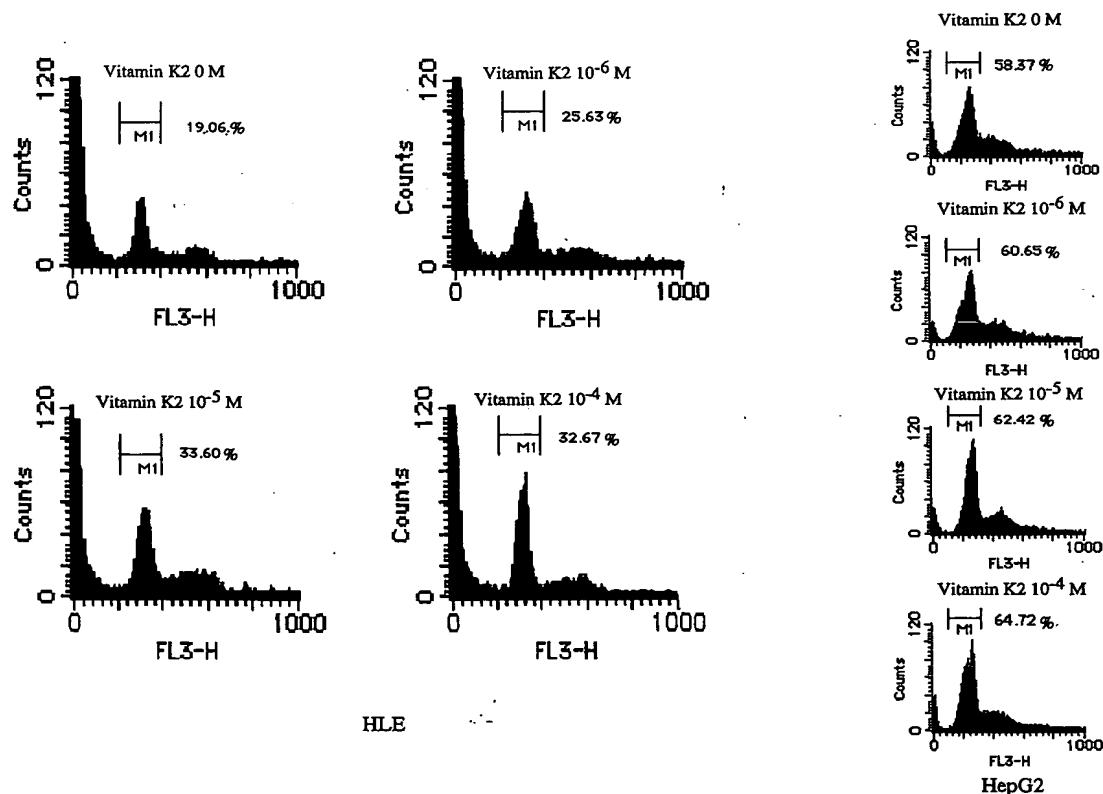
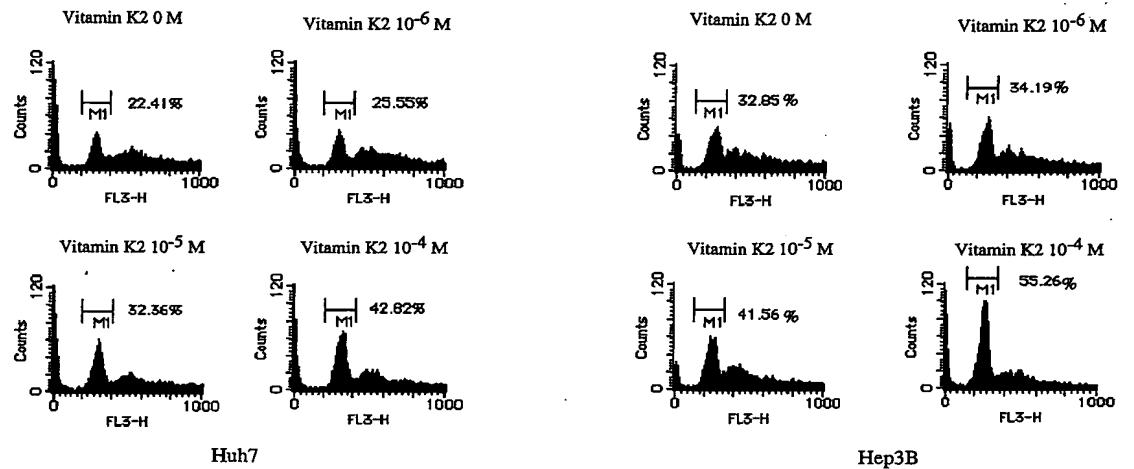
Western blot



Best Available Copy

FIG. 2

Vitamin K2 inhibited HCC cells proliferation through G1 arrest

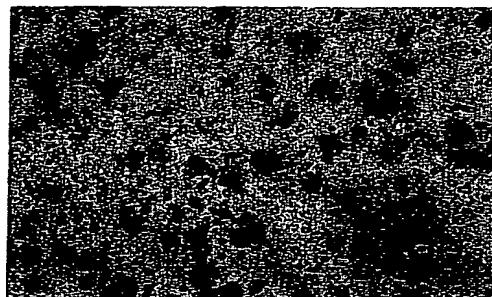


10/553434

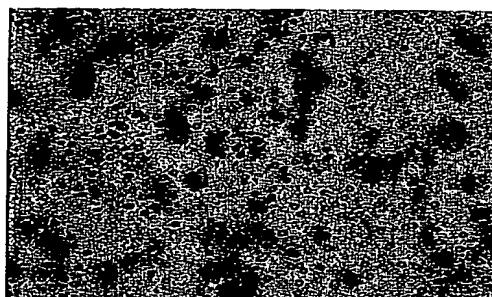
Sheet 3 of 9
Appl. No. To be assigned (U.S. National Phase of
PCT/JP2004/006038, Int'l Filing Date: April 23, 2004);
Dkt No. 1089.0580000/MAC/SJE; Inventors: OZAKI *et al*;
For: MMP Expression Inhibitor

FIG.3

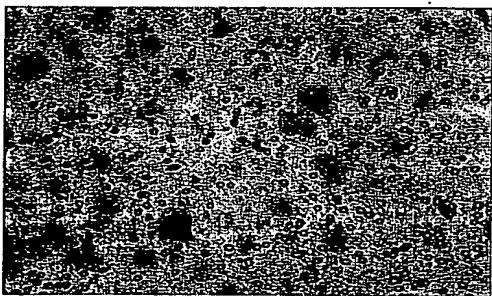
Vitamin K2 dose-dependently inhibit the invasiveness of HepG2 cells



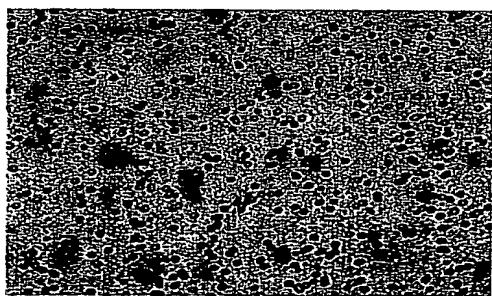
Vitamin K₂ 0 M



Vitamin K₂ 10⁻⁶ M



Vitamin K₂ 10⁻⁵ M



Vitamin K₂ 10⁻⁴ M

Best Available Copy

FIG. 4

Effect of Vitamin K2 on the mRNA expression of some invasion-related fact

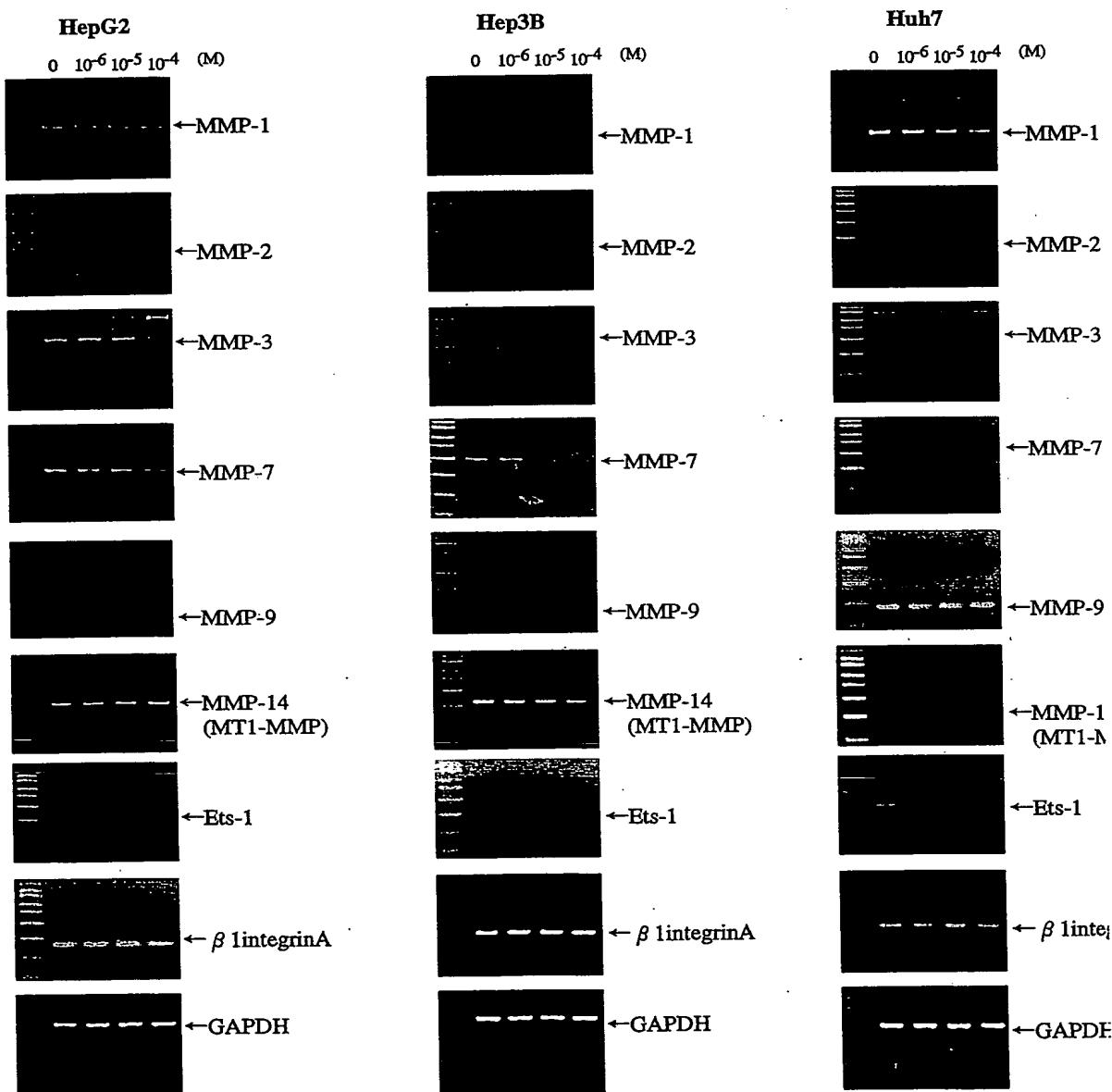
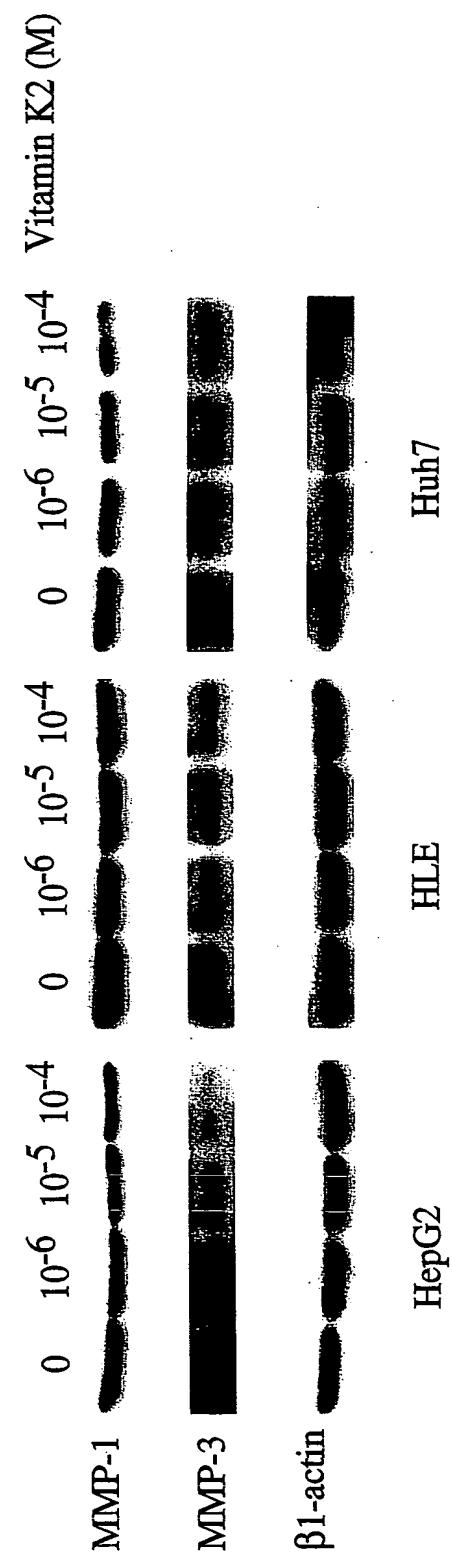


FIG. 5

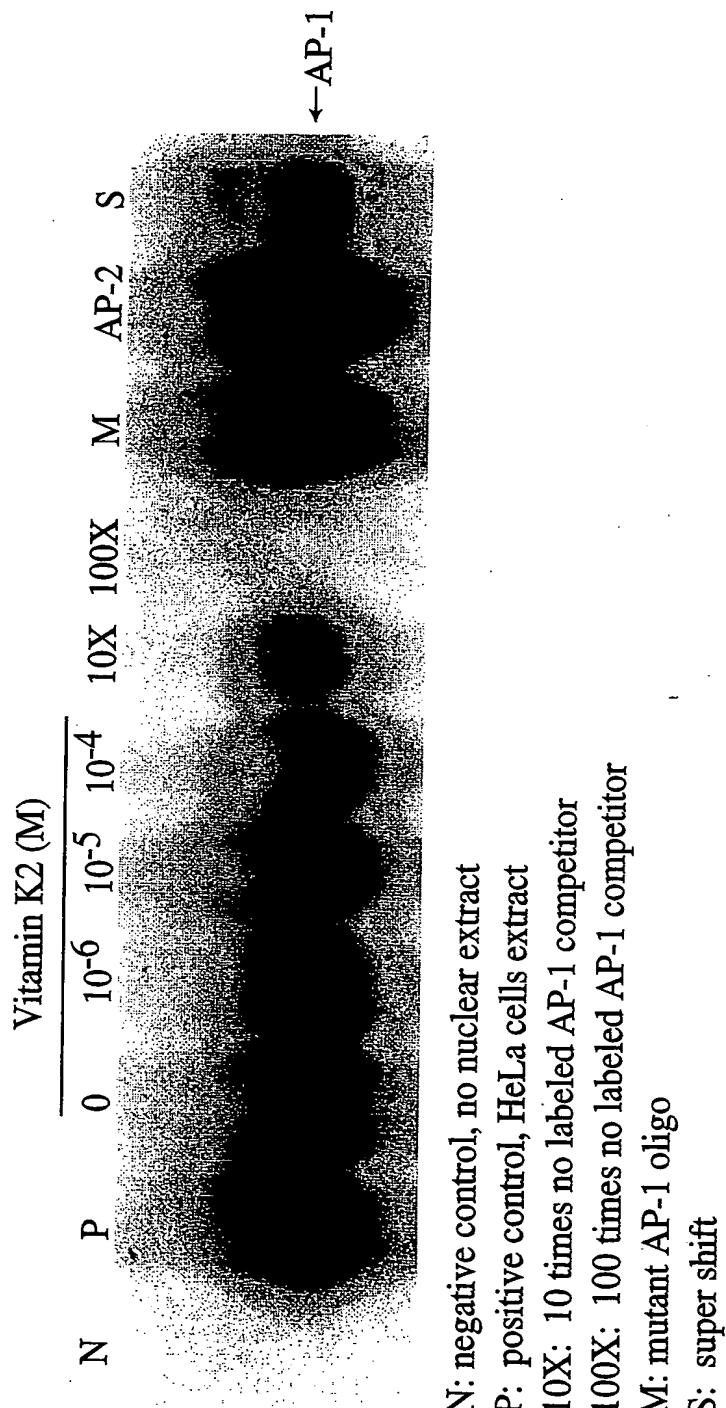
Vitamin K2 inhibit the expression of MMP-1 and MMP-3 protein in hepatoma cells



10/553434

FIG. 6

Effect of Vitamin K2 on AP-1 transcriptional factor by Gel Shift



Best Available Copy

FIG. 7

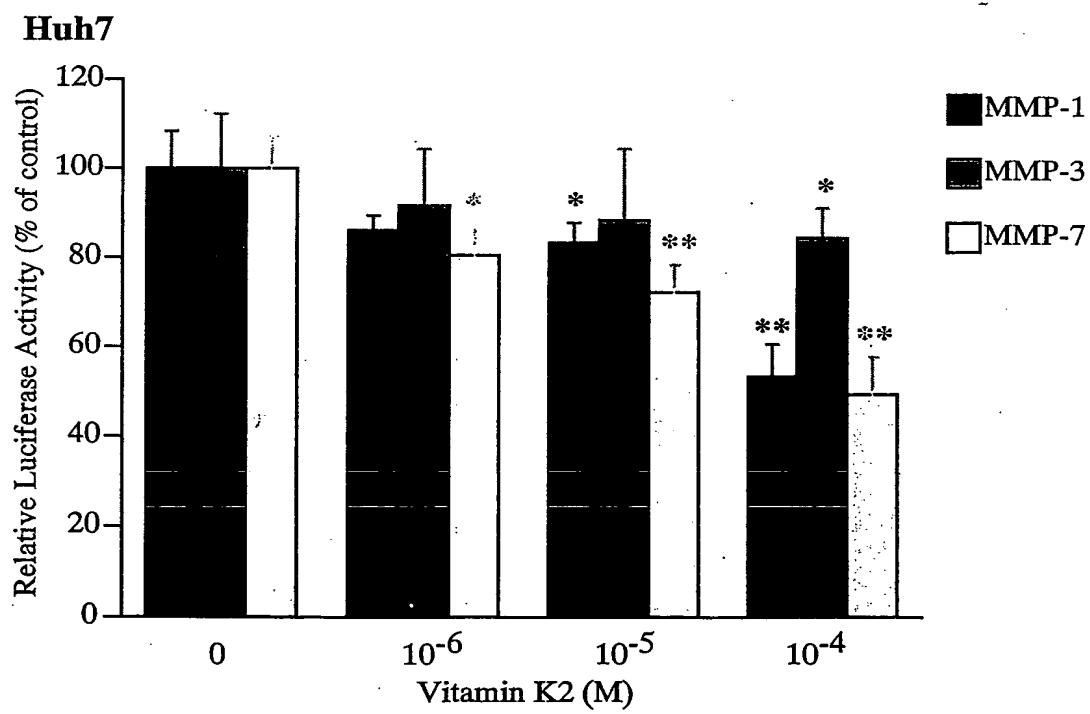
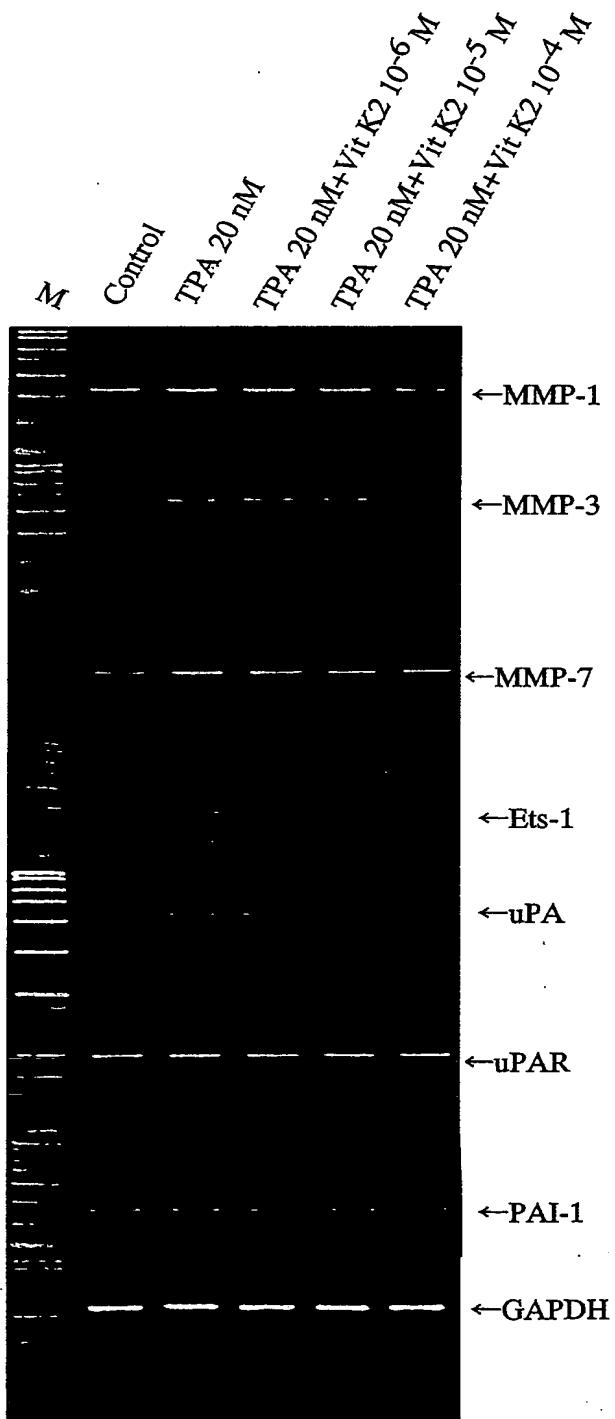
Vitamin K2 inhibit MMP promoter activity in HCC cells

FIG. 8

Vitamin K2 inhibits TPA induced invasion-related gene expression in HepG2 cells



Best Available Copy

FIG. 9

Vitamin K2 inhibits TPA-induced MMP expression in HepG2 cells

